

IN THE SPECIFICATION

Please amend the paragraph beginning on page 19, line 10 as follows:

The reactor shown in Fig. 7 is a reactor based on the self-heat exchanger shown in Fig. 5 integrated to a self-heat exchanger comprising a heating element (heater) or heat absorber (G) incorporated in the fluid forwarding space portion (F). In the reactor having such a configuration, heat is transferred between a high (low) temperature incoming fluid and an outgoing fluid which has been heated (cooled) via the space portion (F) showing maximum (minimum) temperature so that even when the space portion (F) shows a considerably high (low) temperature, the temperature of the outlet (D') is not so high (low) relative to that of the inlet (D) (e.g., 20°C, 700°C, 90°C at D, F and $[[F']]$ D', respectively). Such a configuration can be used as a reactor which allows the use of reduced energy (electric power) for heating when it is required that heating be made to cause the exothermic reaction of fluid but it is desired to prevent as much as possible the change of temperature at which the fluid is again withdrawn. Accordingly, it can be expected to apply such a configuration to all chemical reaction apparatus.